Contents Vol. 28

Vol. 28, No. 1

Guest Editorial
A national energy strategy for the United States: We need to remove the roadblocks to domestic energy
L. Azzato (Clinton, NJ, U.S.A.) 1

Burn-off behaviour in alkali-catalysed CO_2 gasification of bituminous coal char: A comparison of TGA and fixed-bed reactor
R. Meijer (Amsterdam, The Netherlands), H.-J. Mühlen (Essen, Germany), F. Kapteijn (Amsterdam, The Netherlands) and J.A. Moulijn (Delft, The Netherlands) 5

Inhibiting abilities of hydroaromatics against deterioration of hydrocarbon products. Part 2. Application to rubbers and plastics
J. Kubo (Yokohama, Japan) 19

A kinetic model for coal reject pyrolysis at low heating rates
G.Q.L. Lu and D.D. Do (St. Lucia, Qld., Australia) 35

Combustion characteristics of naturally weathered (*in situ*) bituminous coals
S.V. Pisupati, A.W. Scaroni (University Park, PA, U.S.A.) and R.D. Stoessner (Johnstown, PA, U.S.A.) 49

Effect of mobile phase properties and macromolecular network reactivity on liquefaction behavior of bituminous coals
P.L. Chamberlin and H.H. Schobert (University Park, PA, U.S.A.) 67

Identification of nitrogen compounds and amides from spent hydroprocessing catalyst
J.H.K. Choi and M.R. Gray (Edmonton, Alta., Canada) 77

Short communication
Pour point depressant made from thermally treated shale oil
Xu Shuhua, Bao Chong, Lu Shaoxin, Zhang Wanyou and Zhang Fan (Beijing, China) 95

Vol. 28 No. 2

Characterization of resin types from the Hiawatha seam of the Wasatch Plateau coal field
Q. Yu, K. Bukka, Y. Ye and J.D. Miller (Salt Lake City, UT, U.S.A.) 105

Chemical composition and origin of fossil resins from Utah Wasatch Plateau coal
H.L.C. Meuzelaar, H. Huai, R. Lo and J.P. Dworzanski (Salt Lake City, UT, U.S.A.) 119

Resinites, with examples from New Zealand and Australia
G.O. Poinar, Jr. (Berkeley, CA, U.S.A.) 135

A comparison of unimodal and bimodal catalyst deactivatation behavior in a model compound system with rapid coke deposition
W.-P. Wang and J.A. Guin (Auburn, AL, U.S.A.) 149

Kinetics of carbon-residue reduction and viscosity reduction of an atmospheric petroleum residue during catalytic hydrodesulphurization
N. Papayannakos, V. Kaloidas and S. Megalofonos (Athens, Greece) 167

Characterization of condensates from peat and bark drying
R. Alén, L. Fagernäs and E. Kuoppala (Espoo, Finland) 175

Effect of various catalysts on the chemical structure of oils and asphaltenes obtained from the hydroliquefaction of a highly volatile bituminous coal
V.L. Cebolla, M. Diack (Metz, France), M. Oberson, R. Bacaud (Villeurbanne, France), D. Cagniant (Metz, France) and B. Nickel-Pépin-Donat (Villeurbanne, France) 183

Vol. 28, No. 3

Evaluation of catalystic activity in hydroliquefaction of coal
R. Bacaud (Villeurbanne, France) 203

Thermogravimetric-mass spectrometric study on the low temperature oxidation of coals
E. Jakab, F. Till and G. Várhegyi (Budapest, Hungary) 221

Estimation of degree of thermal maturity of coals
M.M. Ekwenchi, G.A. Imobighe and M.A. Adejumo (Jos, Plateau State, Nigeria) 239

Structure changes of coal reject char during pyrolysis at low heat
G.Q. Lu and D.D. Do (St. Lucia, Qld., Australia) 247

Structural tank parameters of Spanish low rank coals and their influence on pyrolysis yields
J.V. Ibarra, I. Cervero, J.L. Miranda and R. Moliner (Zaragoza, Spain) 259

Reduction size of coal particles by heating with petroleum asphalt
T. Sakaki, S. Yasuda, S. Arita, H. Hirosue (Tosu, Japan) and H. Honda (Tokyo, Japan) 275

Extraction of tar acids with glycols
K.K. Tiwari and D.K. Sen (Dhanbad, India) 287

Short communications

An attempt to separate nitrogen compounds
K. Ukegawa, A. Matsumura, K. Yazu, Y. Kodera and T. Kondo (Ibaraki, Japan) 301

Comparative analysis of methods for determination of calorific values of natural gas mixtures
B.D. Škrbić and J.Dj. Cvejanov (Novi Sad, Yugoslavia) 307

Newsnotes 315
Author Index Volume 28 325